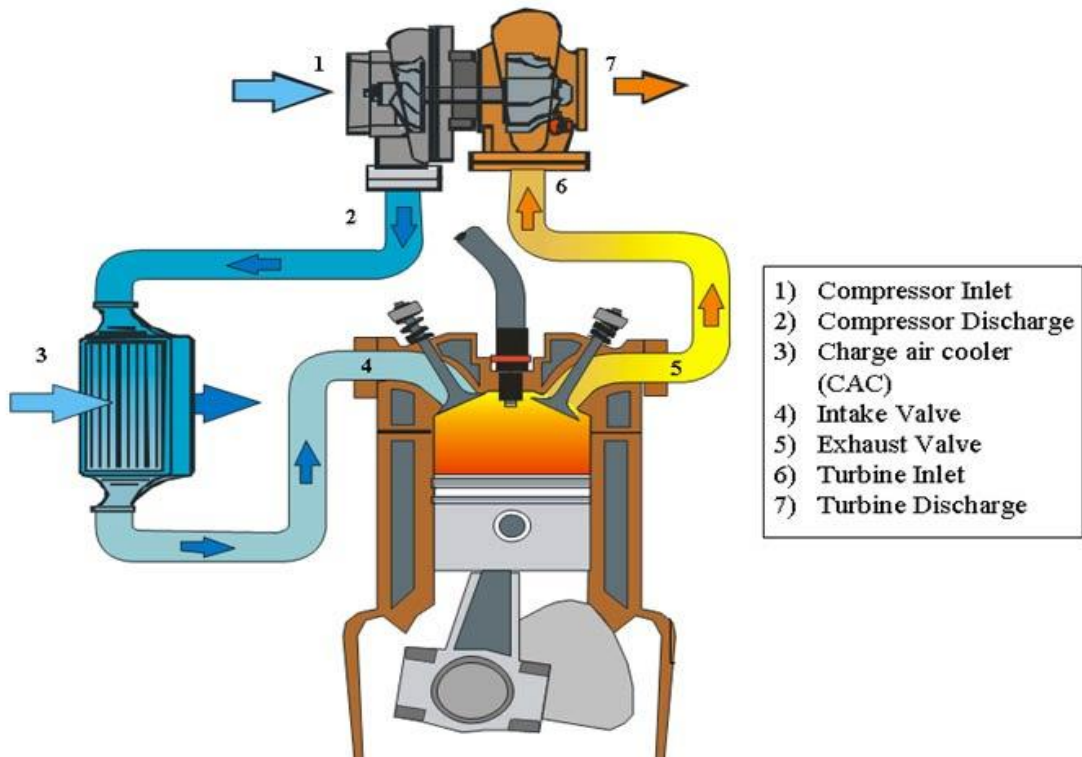
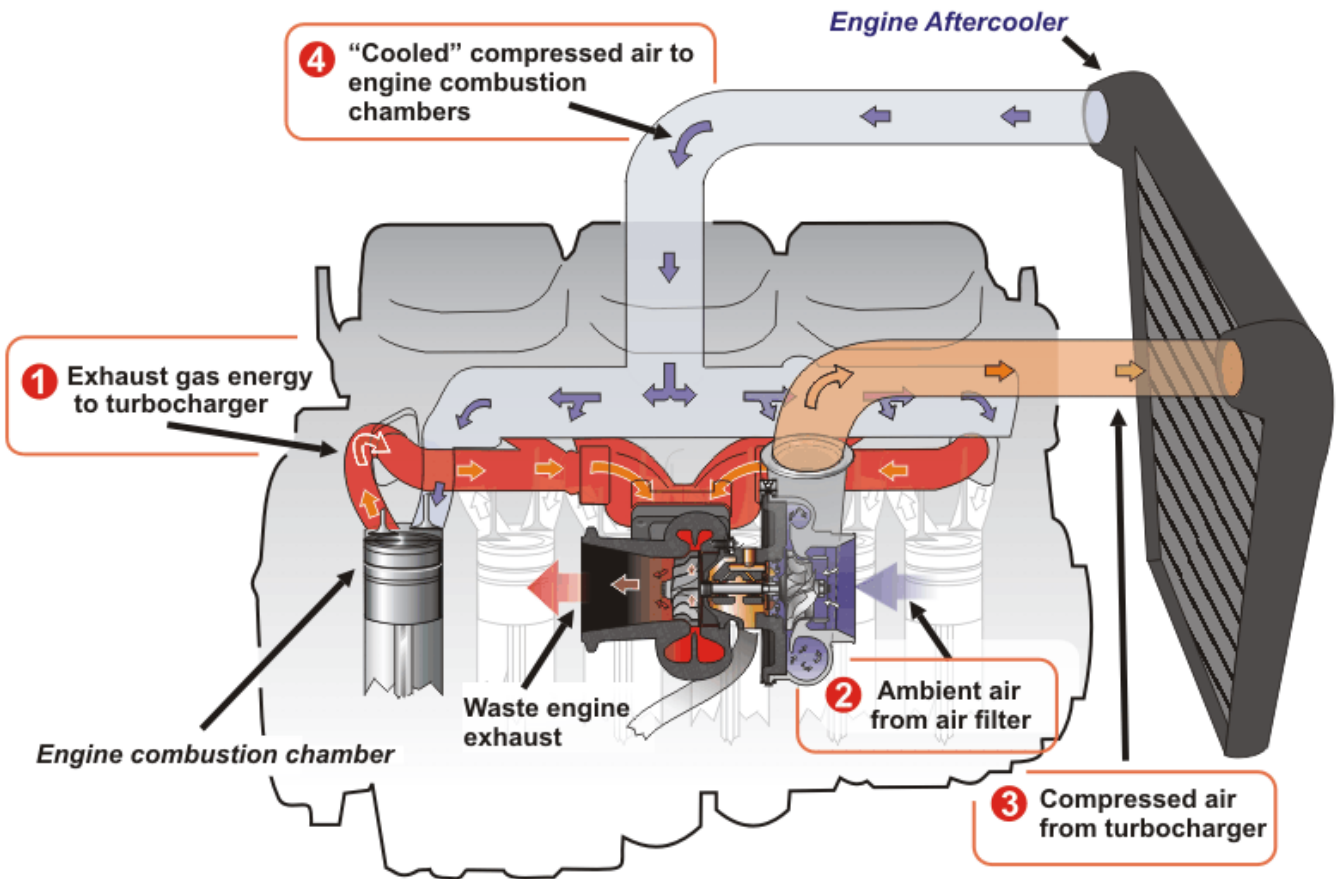




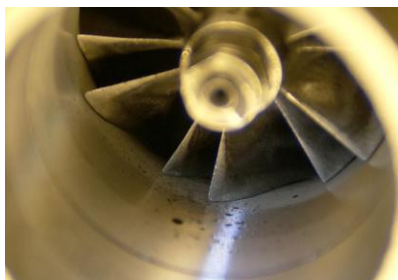
TURBOCHARGER FAILURE

OIL LEAKS

Typical Commercial Diesel Turbocharged Engine System



FAILURES DUE TO OIL LEAKS FROM TURBOCHARGER



The turbocharger runs on a thin film of oil that lubricates the bearings on the turbine shaft. The oil is kept in place by piston rings at the turbine and compressor ends of the bearing housing. These piston rings need positive air pressure inside the compressor and turbine housing to ensure that oil keeps lubricating the bearings and prevent it seeping into the housings.

Any restriction on the inlet side will create a vacuum which will pull oil past the rings at the compressor side housing.

Idling the engine for long periods will make the turbocharger rotate at very low speeds and hence with low air pressure. The resulting vacuum will cause oil to leak into the turbine housing. Both the situations will result in insufficient / lack of oil for the turbine bearings.



Causes of oil leaks at compressor side:

- Chocked / Blocked or restricted air intake filter.
- Chocked / Blocked / Distorted or restricted air intake pipes or hoses.
- Air leaks from the intake hoses and / or from the intercooler.



Causes of oil leaks at turbine side:

- Air Leakage in the exhaust system.
- Air Leakage in the EGR system.
- Any restriction in the oil drain pipe from the turbocharger to the engine / oil sump.

FAILURES DUE TO OIL LEAKS FROM TURBOCHARGER



Causes of oil leak from both the compressor & turbine side:

- Any restriction in the oil drain pipe from the turbocharger to the engine / oil sump.
- Engine breather is Blocked / Choked / Restricted.
- Excessive clearance on the turbocharger bearings and / or Physical damage to the turbocharger's rotating parts.
- Hot engine shutdowns creating carbon deposits (coke) in the centre housing.
- Wrong turbocharger fitted.



Preventing turbocharger failures caused by oil leakages.

- ✓ Ensure there are no blockages or restrictions in the air and oil drain systems.
- ✓ Ensure there are no leaks in the exhaust system.



Service Centers:

Palakkad

17/550(9),KTV Tower,
West Fort Road, Palakkad – 678 001
Phone : 0491 – 3260808, 3208000

Kochi

40/618, Bhagavathy Parambil Building,
Near Federal Bank, Palarivattom, Kochi – 682 025
Phone : 0848 -3114333

Kozhikode

3/165-A,Nano Building,
Major Santhosh Road, Behind Co-Op Urban Bank,
Vandipetta, West Nadakkavu, Kozhikode – 673 011
Phone : 0495 3104333

Collection Centers:

Kannur

EP III/178, EVES Arcade,
Opposite Technical High School, Thottada, Kannur – 670 007
Phone : 0497 – 3268785

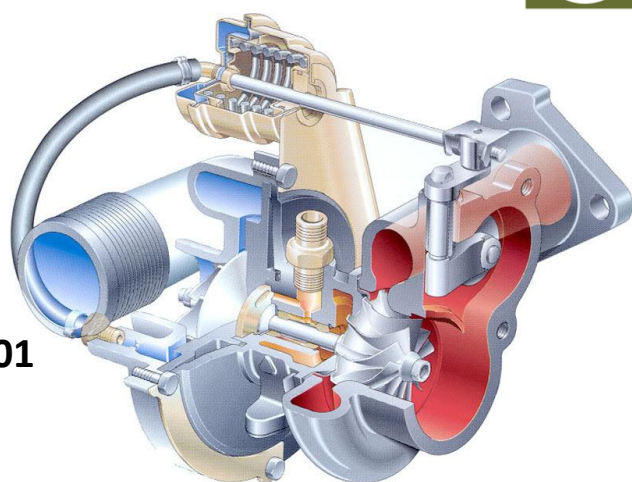
Thiruvananthapuram

TC 36/1090(9), Narayan Nilayam,
Eanchakkal Junction, Vallakadavu P.O., Thiruvananthapuram – 695 008
Phone : 0471 – 3198785

Service Helpline : +91 491 3208000

Technical Assistance : +91 93491 27136

Website : www.paramountautozone.com
www.paramountgrp.net



Paramount auto **zone**

ISO 9001:2008 Certified Company



Come to us for a cleaner and greener road to the future..